

Amendments to the claims:

Claim 1. (Currently amended) A method of treating diabetes in a subject in need thereof, said method comprising ~~the steps of:~~

~~— a) providing in said subject one or more cells capable of producing insulin or one or more cells capable of producing progeny cells that produce insulin; wherein said cells express a transgene encoding an IAP polypeptide, or fragment thereof, under the control of a constitutive, inducible, or cell-specific promoter; wherein said nucleic acid sequence is positioned for expression in said cells, and wherein expression of said IAP polypeptide that increases survival of said cells relative to untreated control cells not expressing said IAP; and~~

~~e) transplanting said cells from step b) into said subject, wherein said transplanting results in the production of insulin by said cells in an amount sufficient to treat diabetes in said subject.~~

Claim 2. (Currently amended) The method of claim 1, wherein said cells are transduced ~~transducing of step b)~~ is performed *ex vivo*.

Claim 3. (Currently amended) The method of claim 1, wherein, ~~in said transducing step b)~~, said cells are transduced with a viral vector.

Claims 4-5. (Cancelled)

Claim 6. (Currently amended) The method of claim ~~5~~ 1, wherein said constitutive promoter is selected from the group consisting of ~~the insulin promoter,~~ the CMV promoter, the SV-40 promoter, and the ~~chicken~~ actin promoter.

Claim 7. (Currently amended) The method of claim ~~6~~ 1, wherein said cell-specific or inducible promoter ~~insulin promoter~~ is a human insulin promoter.

Claim 8. (Cancelled)

9. (Currently amended) The method of ~~any one of claims 1-8~~ claim 1, wherein said subject is a human.

10. (Currently amended) The method of ~~any one of claims 1-9~~ claim 1, wherein said diabetes is type 1 diabetes.

11. (Currently amended) The method of ~~any one of claims 1-10~~ claim 1, wherein said nucleic acid sequence is selected from the group consisting of *xiap*, *hiap-1*, *hiap-2*, *m-xiap*, *m-hiap-1*, or *m-hiap-2*.

12. (Currently amended) The method of ~~any one of claims 1-11~~ claim 1, wherein said IAP polypeptide comprises at least one BIR domain and has caspase-inhibiting activity.

13. (Original) The method of claim 12, wherein said IAP polypeptide comprises two BIR domains.

14. (Currently amended) The method of ~~any one of claims 1-13~~ claim 1, wherein said cells comprise pancreatic beta islet cells.

15. (Currently amended) The method of ~~any one of claims 1-14~~ claim 1, wherein said cells comprise ~~eells selected from~~ adult stem cells or embryonic stem cells that are capable of differentiating to into insulin-producing cells or that are capable of producing progeny cells that are insulin-producing cells.

16. (Currently amended) The method of ~~any one of claims 1-15~~ claim 1, wherein said cells are isogeneic cells.

17. (Currently amended) The method of ~~any one of claims 1-16~~ claim 1, wherein said cells are allogeneic cells.

18. (Currently amended) The method of ~~any one of claims 1-17~~ claim 1, wherein said cells are xenogeneic cells.

19. (Original) The method of claim 18, wherein said xenogeneic cells are isolated from a pig, a sheep, or a baboon.

20. (Currently amended) The method of claim 18, wherein said xenogeneic cells are ~~derived from an animal genetically engineered such that said cells have to have~~ increased survival in a recipient following transplantation, relative to a control cell not expressing said IAP ~~derived from an animal which has not been genetically engineered.~~

21. (Currently amended) The method of ~~any one of claims 1-20~~ claim 1, wherein said ~~transplanting step e)~~ comprises transplanting said cells is into the pancreas, the liver, or the kidney of said subject.

22. (Currently amended) The method of claim 21, wherein said transplanting step ~~e)~~ comprises transplanting said cells is into the kidney capsule of said kidney.

23. (Currently amended) The method of ~~any one of claims 1-22~~ claim 1, wherein said ~~increase in survival of said transplanted cells is~~ expression of said IAP polypeptide increases survival of said cells by at least 20%, relative to the survival of untreated control cells not expressing said IAP.

Claim 24-53. (Cancelled)

Claim 54. (Currently amended) The method of ~~any one of claims 1-53~~ claim 1, wherein said method further comprises administering an immunosuppressive agent to said patient subject.

Claim 55. (Original) The method of claim 54, wherein said immunosuppressive agent is selected from the group consisting of cyclosporin, cyclophosphamide, prednisone, dexamethasone, methotrexate, azathioprine, mycophenolate, thalidomide, FK-506, sirolimus, tacrolimus, daclizumab, and systemic steroids.

Claim 56. (Currently amended) The method of ~~any one of claims 1-55~~ claim 1, wherein said method further comprises administering an anti-apoptotic agent to said patient subject in an ~~apoptosis-inhibiting~~ amount sufficient to inhibit apoptosis.

Claim 57-62. (Cancelled)

63. (Currently amended) ~~Use of~~ A cell capable of producing insulin or capable of producing progeny cells that produce insulin, wherein said cells express a transgene for the manufacture of a medicament for the treatment of diabetes, wherein said cell is transduced with a nucleic acid sequence encoding an IAP polypeptide, said nucleic acid sequence positioned for expression in said cell, and or fragment thereof, under the control of a constitutive, inducible, or cell-specific promoter, wherein expression of said IAP polypeptide increases survival of said cell relative to an untreated control cell not expressing said IAP.

64. (New) The cell of claim 63, wherein said XIAP fragment comprises at least

one BIR domain.

65. (New) The cell of claim 64, wherein said BIR domain is a BIR3 domain.

66. (New) The cell of claim 63, wherein said cell is a beta-islet cell.

67. (New) The method of claim 1, wherein said ~~transduction step occurs~~ cells are transduced *in situ*.

68. (New) The method of claim 1, wherein said providing in said subject is by transplantation.

69. (New) A medicament for the treatment of diabetes, said medicament comprising a cell capable of expressing insulin or capable of producing progeny cells that produce insulin in an amount sufficient to treat said diabetes, wherein said cell is transduced with a heterologous human XIAP polypeptide or fragment thereof under the control of a constitutive, inducible, or cell-specific promoter, wherein expression of said IAP polypeptide increases survival of said cell relative to an untreated control cell not expressing said IAP.